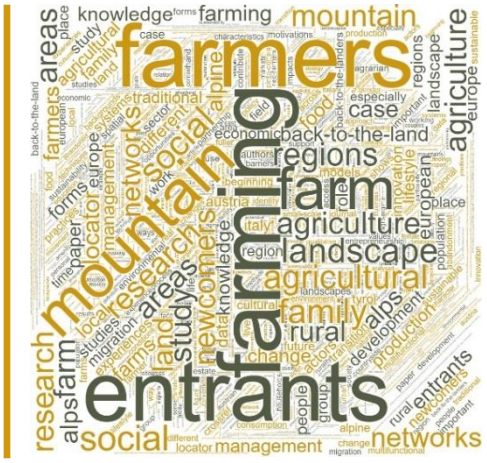
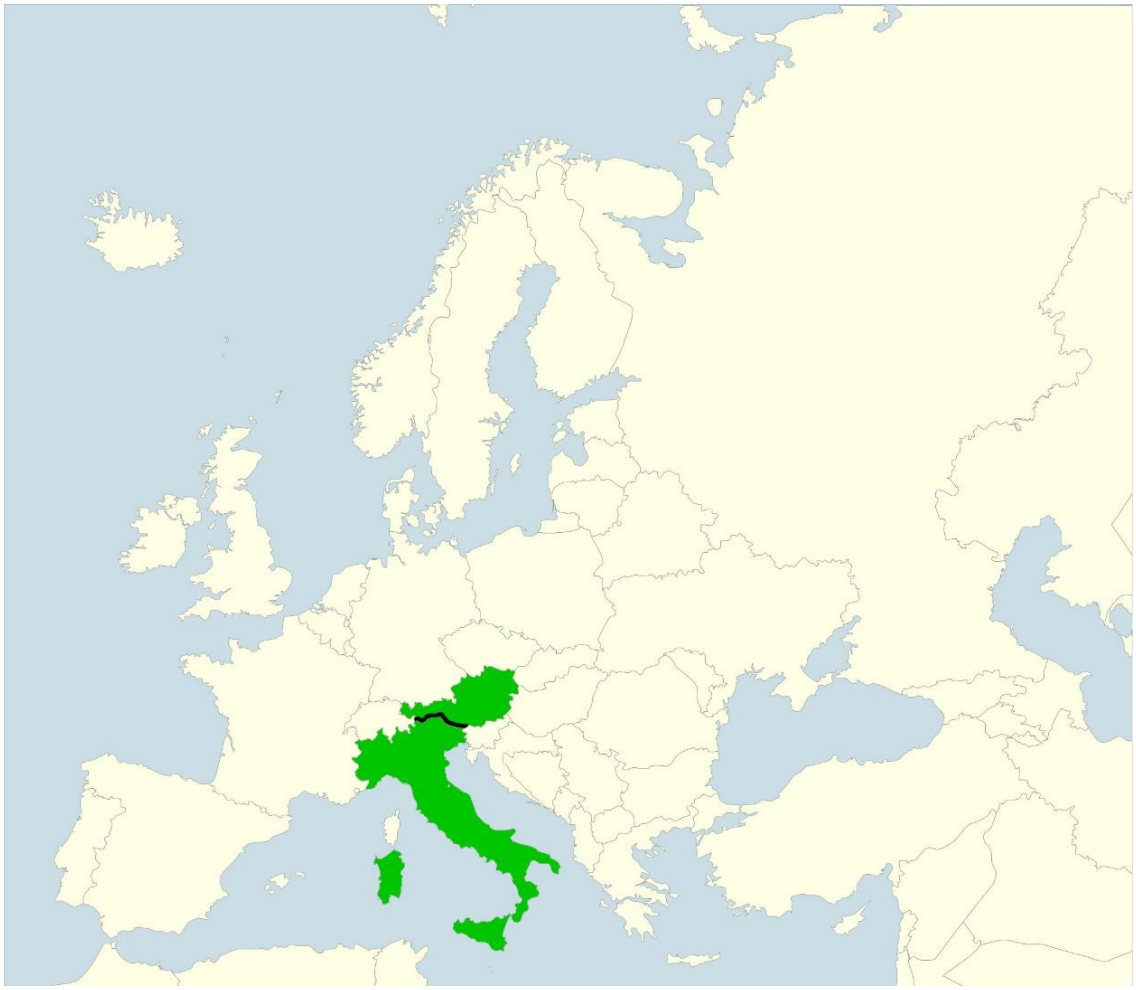
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NEW PLAYERS ON A TOUGH FIELD

Identifying New Entrants to Mountain Farming in the Austrian Alps

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Abstract: The pivotal aim of this research is to identify new entrants to mountain farming, their routes into practicing and resulting environmental impacts. Following an actor-network approach, this multi-regional case study was conducted in two remote regions of the Western Austrian Alps and in a bordering Alpine region in South Tyrol (Italy). All data was generated using semi-structured interviews on site and official agricultural statistics.

Both autochthons and foreign newcomers to mountain farming display a great deal of idealism to fulfil their agricultural dreams. Their self-determination and bid for independence from the agricultural industry affects their thinking and decisions on housing, farming and collaborations, resulting in far-reaching social and spatial impacts on the sociocultural landscape. In implementing sustainable and extensive farming practices, new entrants act as role models and thus highlight alternatives beyond the prevailing mountain agricultural regime.

Keywords: Mountain farming, New entrants, Newcomers, Tyrol, Socio-technical-network, Eastern Alps, Vorarlberg, East Tyrol, South Tyrol

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Zusammenfassung: Ziel dieses Artikels ist es in die Berglandwirtschaft neu eingestiegene Personen, ihre verschiedenen Wege dorthin und die daraus resultierenden Mensch-Umwelt-Einflüsse zu identifizieren. Die hier vorgestellte multi-regionale Fallstudie basiert auf einem Actor-Network-Ansatz und wurde in zwei Hochgebirgsregionen der westlichen österreichischen Alpen sowie in einem daran angrenzenden Alpengebiet Südtirols (Italien) durchgeführt. Sämtliche Daten wurden unter Zuhilfenahme semi-strukturierter Interviews vor Ort und aus amtlichen Agrarstatistiken erhoben. Im Feld wurden sowohl Autochthone als auch neu Zugezogene gefunden, welche sich durch viel Idealismus ihren landwirtschaftlichen Traum verwirklichen möchten. Beide Gruppen streben nach Selbstbestimmung und Unabhängigkeit von der Agrarindustrie, wodurch ihre Art zu wohnen, zu denken, zu wirtschaften und zusammenzuarbeiten beeinflusst wird. Daraus ergeben sich weitreichende soziale und räumliche Auswirkungen für die alpine Kulturlandschaft. Darüber hinaus wird den neu Eingestiegenen aufgrund ihrer nachhaltigen und extensiven Bewirtschaftungsmethoden eine Vorbildfunktion zuteil, wodurch sie alternative Wege abseits des vorherrschenden berglandwirtschaftlichen Regimes aufzeigen.

Schlagwörter: Berglandwirtschaft, Quereinstieg, sozio-technisches Netzwerk, Ostalpen, Vorarlberg, Osttirol, Südtirol

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Highlights

- New entrants are autochthonous or in-migrated people and have undergone a semi- or non-agricultural socialization;
- It is difficult to define new entrants and identify them in the field;
- Self-determination along the spheres of housing, thinking, farming and collaborating is a major motive for operating a mountain farm from scratch;
- New entrants question the prevailing agricultural regime and act as a role model within the agro-community;
- The progressive mindset of new entrants rubs off on conventional farmers and leads to manifold social and spatial impacts.

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1. Mountain Farming in the Alps

For thousands of years, the Alpine arch has been a heterogeneous cultivated habitat characterised by permanently populated valley floors and neighbouring hillsides on the one hand and seasonally inhabited, less intensively managed, high Alpine pasture on the other. In the field of agriculture, one subgroup deserves special attention – the *mountain farmers*. Streifeneder (2010: 5f) distinguishes mountain farming from conventional agriculture in the lowlands in relation to the unfavourable management opportunities, which are limited by natural conditions such as altitude, climate, slope, soil, etc. (figure 1).



Fig 1. Farming and housing in the mountain regions of Montafon (left) and East Tyrol (right). Source: own photographs

Another peculiarity is their generative consciousness, meaning that knowledge and management techniques are still handed down from generation to generation. The unique character of the Alpine *cultural landscape*[3] specifically reflects this phenomenon (Bender & Haller 2017: 132). In this respect, Austria has a key position among Alpine countries: the largest proportion of the Alpine range resides within its territory (Alpenkonvention 2018: 13; Flury et al. 2013: 105); and almost half of all the country's farmland is located in mountainous terrain, which is more than in the other seven Alpine countries (Alpine Convention 2017: 38).[4] Agriculture is therefore vital for the conservation of mountain regions in Austria, as farmers generate significant amenities for the local population and tourists with their specific techniques adapted to steep terrain (Quendler 2017; Tieskens et al. 2017; Cline 2013; Flury et al. 2013; Price & Steiner 2004; Wrbka et al. 2004). The Alpine Convention has also underlined its importance with the *Protocol on the Implementation of the 1991 Alpine Convention in Mountain Farming*, and made it a priority to protect and support this special economic sector (Alpine Convention 2017: 8). Given climate change, the preservation of the Alpine cultural landscape by mountain farmers will become even more important in the future – especially in mitigating natural hazards (Bender et al. 2011: 409).

[3] Those elements of the visible landscape that have been anthropogenically influenced, as well as the cultural amenities created, or culture embedded in it and its perception by the autochthonous population (Tieskens et al. 2017: 30).

[4] An exception is the miniature state Liechtenstein, whose farmland lies entirely within the Alps.

Nevertheless, developments of the past century show that both mountain regions as cultural site and landscape (Cocca et al. 2012; Marini et al. 2011; Gellrich & Zimmermann 2007) and their caretakers (Flury et al. 2013; Streifeneder 2010; Soliva 2007; Streifeneder et al. 2007) are gradually disappearing. Since industrialization emergence at the beginning of the nineteenth century, a growing number of mountain farmers along the Alpine arch are confronted with existential problems. Remote Alpine regions have specifically lost their attractiveness as agro-production sites (Penz 2011: 10). Therefore, a farm is often no longer profitable for potential farm successors or heirs to take over (Pinter & Kirner 2014: 442). In the end, those affected seek more financially profitable working conditions off the farm within their community or find employment elsewhere and migrate as a result.

A glance at Austria shows that its number of farms decreased by about 63% from 1951 to 2016. As figure 2 illustrates, this development has attenuated slightly since 2006 and is mainly due to targeted subsidies for farm operators and their possibility of operating sideline activities (Mann 2003: 34f).

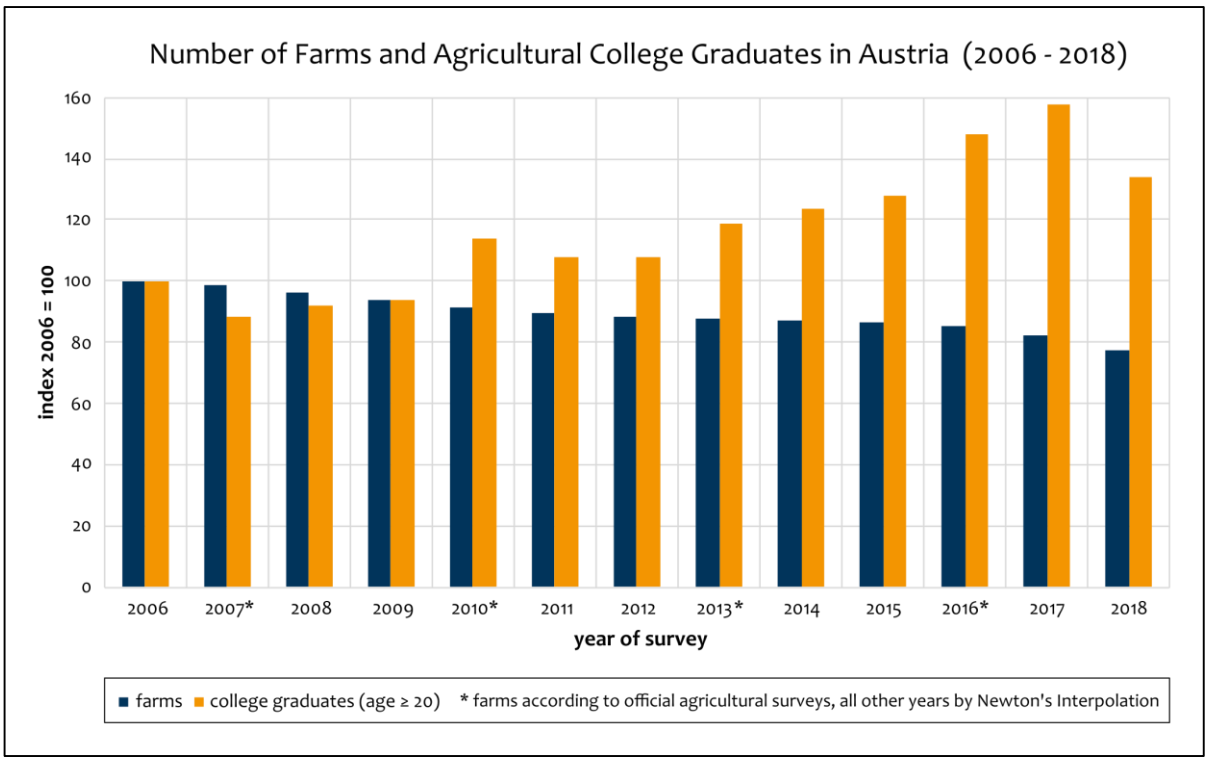


Fig 2. Development of farms (Statistik Austria 2018) and graduates of agricultural colleges (Statistik Austria 2021) in Austria in the past decade. Source: own elaboration

The increasing number of agricultural graduates (figure 2) underlines another issue counteracting Austria's declining farm numbers. Between 2006 and 2018, the interest of adults in agricultural education increased significantly. During this period, the number of people aged 20 or older (adult education) who completed agricultural technical school rose by around 34%. There are two explanations for this trend: firstly, young farmers who take over their parents' or relatives' farms generally need a degree to qualify for agricultural subsidies. Secondly, an increasing number of people outside the farming sector are showing an interest in farming. The latter are worth investigating in more detail, as they are already making headway in non-Alpine areas of Europe but have remained predominantly undiscovered in mountain regions like the Alpine space (Monllor i Rico & Fuller 2016). Thus, the major aim of this research is to identify new entrants, their routes into mountain farming and their resulting environmental impacts.

Chapter 2 provides a comprehensive overview of international, national and regional research literature on new entrants to farming, focusing on scientific contributions that explicitly deal with newcomers to mountain agriculture. Chapter 3 offers information on the research design of this multi-regional case study (for location of regions see figure 3) by presenting how these new entrants were identified in

the field and the methods used to record and analyse data. Chapter 4 focuses on the results, which are discussed in detail within chapter 5 alongside a definition of new entrants into mountain farming and their reflections on interactions off and on their farm. Finally, chapter 6 gives a brief summary of all the topics presented in this paper.

2. Theoretical Perspectives and Key Research Questions

Current economic uncertainties, global warming, the foreseeable end of fossil fuels and the question of food security lay the foundations for a new form of migration (Wilbur 2014a: 1). Those involved wish to deliberately separate themselves from mainstream society. This stems from a desire for more autonomy and more quality in everyday life along with goals of living in accordance with nature instead of against it (Barcus & Halfacree 2018: 219 & 223; Pinto-Correia et al. 2015: 68; Wilbur 2014a: 7f). These three pillars culminate in a special form of rural or agricultural lifestyle.

The chronological examination of relevant literature highlights a multitude of protagonists and movements in the field of farming with almost the same objective: *back-to-the-landers* (Jacob & Brinkerhoff 1986), *new pioneers* (Jacob 1997), *neo-farmers* (Mailfert 2007), *lifestyle farmers* (Ollenburg & Buckley 2007), *new agrarians* (Trauger 2007), *new peasantries* (Ploeg 2008), *neo-peasants* (Brunori et al. 2011) or *new farmers* (Beismann et al. 2015).

But it is not only the designation of new actors in agriculture that is confusing. The further definition of what a new entrant is turns out to be a major challenge too and above all requires a distinction between 'new' and 'old' players in agriculture. Due to the length of their prior time on a farm, a differentiation is made between new entrants and family farmers who have been active for several generations. The timeframe of someone's 'arrival' varies and is typically set between five (EIP-AGRI 2015: 5) and ten years (Ahearn & Newton 2009: 3). Moreover, a distinction is made between their economic status. According to the European Union focus group for Agricultural European Innovation Partnership (EIP-AGRI 2016: 7), new farmers must not only live on the farm but also need to actively manage it and sell their produce. However, these criteria are difficult to substantiate, as subsistence farming, for example, is not taken into account but can provide significant support for new entrants. With regard to income, Pinto-Correa et al. (2016: 36) offer a more precise classification and declare new entrants as farmers *"[…] who do not derive their primary income from farming and/or to whom production income is not the main driver of land use decisions […]. These are in most cases new entrants but can also be locals"*. This further indicates that someone's arrival is not primarily linked to in-migration, as Grubbström & Josse (2021) and Wilbur (2014b) suggested. For Monllor i Rico & Fuller (2016: 534), the migration background of farming newcomers is less important than their previous connection to agriculture. In summary, new entrants are typically classified by either their duration in a place, the purpose of their farming, their origins or their agricultural socialization. None of these factors take farming conditions into account (e.g., lowlands, valley floors and hillsides) despite the phenomenon not being new.

Such a strong desire for rural life seems to have originated in North America around the 1980s when Jacob & Brinkerhoff (1986) first described the back-to-the-land movement. And yet, it had already been known on the Europe continent for more than a decade as *neo-ruralism* (Chevalier 1981; Garcia 1977). While early back-to-the-landers were primarily motivated by basic needs such as food production, over time a much broader range of motivations developed within the movement, whose actors were much more lifestyle and amenity-oriented (Dolci & Perrin 2017: 148f). According to Poli (2013), recurring economic, health or war crises are key driving forces for this development. Even in the future, crisis will probably remain a defining factor of rural in-migration, fuelling the dream of a self-determined life and agriculture uncoupled from modernization (Barcus & Halfacree 2018: 219; Mailfert 2007: 21). After more than three decades have passed, the desire to farm seems to have been reignited. The COVID-19 pandemic, its related restrictions and their mark on society have probably also impacted this situation, as past crises have already shown.

Pinto-Correia et al. (2015: 72) label this agricultural renaissance *lifestyle farming* and consider the ownership and management of land as both a reason for migration and an up-coming lifestyle. A clear

distinction from similar theories of lifestyle-related migrations might seem rather difficult to make at first. Amenity migrants, for example, often live in multiple residences and are able to continue their former employment working in multi-localities and/or via home office (Steinicke et al. 2012: 332), which leaves them predominantly consuming the cultural landscape in a passive way. In contrast, in-migrated lifestyle farmers are actively and intimately involved with nature and animals and, thus, typically tied to a site. Obviously, this lifestyle-oriented migration trend is related to *counter-urbanization* but differs in a strong desire for self-realization through agriculture (Halfacree 2008: 488). Pinto-Correia et al. (2016: 38) added that farming is a decisive reason for newcomers to stay after migrating to their destination.

In terms of on-site management techniques, new entrants typically differ from conventional farmers (Monllor i Rico & Fuller 2016: 540). In contrast to family farmers, for example, who have been working commercially for generations, newcomers to agriculture focus more on closeness to nature itself and less-intensive food production (Wilbur 2014a: 7f; Ploeg 2010: 5). Accordingly, these new players in agriculture no longer see themselves solely responsible for food provision. As Wilson (2009: 169 & 173) points out, farmers in the sense of *multifunctional agriculture* will take on far more tasks in the future, such as landscape protection or the supply and management of the landscape as cultural site. Consequently, agriculture is undergoing a transition from *productivism* to *post-productivism* (Wilson 2001: 93). A noteworthy fact is that the majority of new agricultural participants do not have any prior knowledge of farming and discover agriculture in an unconventional way (Monllor i Rico & Fuller 2016: 531; Pinto-Correia et al. 2016: 40; Mailfert 2007: 29). Accordingly, these people neither receive their main income from the agricultural sector nor do they move to the countryside for economic reasons (Sutherland et al. 2019: 476). The movement can primarily be seen as a bottom-up revolution of the primary economic sector, which deliberately disregards the overarching agricultural policy and its regulations. This migration trend gradually increases the importance of less intensive agriculture worldwide, initiating a transition from an agro-industrial to an agro-social paradigm, which even goes far beyond agro-ecological issues (Seuneke & Bock 2015; Monllor 2013).

The fact that something big is taking place in the field of agriculture is now demonstrated by studies from all over the globe, including Canada (Ngo & Brklacich 2014), the USA (Ahearn & Newton 2009), China (Xie 2021) and Japan (Zollet & Maharjan 2021). In rural Europe, too, new scientific research on this topic has recently been conducted (Pindado et al. 2018; Sutherland et al. 2017; EIP-AGRI 2015, 2016). Regional studies on this subject to date include: Pinto-Correia et al. (2016, 2017), Dolci & Perrin (2018), Dolci et al. (2019) in Portugal; Pinto-Correia et al. (2015) in Great Britain and Bulgaria; Mailfert (2007) in France; Blekesaune et al. (2010) in Norway; Chatzitheodoridis & Kontogeorgos (2020) in Greece; Grubbström & Josse (2021) in Sweden; and Jack et al. (2019) and Hopkins et al. (2020) in the UK. All of them provide a detailed insight into current agricultural changes in non-Alpine, rural regions of Europe. So far in relation to mountain farming, regional research exists only for Italy: Battaglini & Corrado (2014); Fassio et al. (2014); Garde et al. (2014); Gretter et al. (2019); Varotto & Lodatti (2014); Wilbur (2014a, 2014b); and Löffler et al. (2016). There is a startling lack of research concerning the Austrian Alps, even though, as mentioned, this specific region is exceptional in terms of agriculture. Even though the research of Korzenszky (2018) addresses extrafamilial farm successions in selected regions of Eastern Austria, it focuses more on the transfer and less on the farming of new entrants and its impacts.

In fact, the appearance of newcomers to mountain areas leads to social and spatial environment transformations that likely impact socio-economic changes on the high mountain regions concerned. Garde et al. (2014: 7) consider the takeover and reestablishment of existing farms as a strong stabiliser for Alpine agriculture. The existence of new farmers in peripheral areas acts as a notable multiplier in most cases. Therefore, traditional and autochthonous farmers are confronted with new, less intensive ways of working and sustainable thinking, which could ultimately contribute to securing their future (Monllor i Rico & Fuller 2016: 546; Pinto-Correia et al. 2015: 72). Impacts on the cultural landscape can also be seen. Agriculturally ambitious newcomers reforest woodlands, maintain formerly abandoned meadows and fields, take up and improve traditional farming methods and preserve traditional Alpine buildings (Löffler et al. 2016; Fassio et al. 2014; Garde et al. 2014; Varotto & Lodatti 2014; Wilbur 2013, 2014b).

In summary, the above measures contribute to the conservation of cultural heritage in high mountain communities, which clearly highlights the importance of new actors in agriculture, even for Austrian mountain farming. A large number of these areas and people will especially be confronted with the challenges of agro-structural changes in the future. Although new entrants have so far received inadequate attention, they are essential for the survival of Austria's agriculture (Korzenszky 2018: 13). Asking the following key research questions is therefore necessary to shed light on this phenomenon:

- What types of new entrants to mountain farming can be identified in the field?
- How do they differ from each other?
- What are their routes into agriculture and what motivates them to start farming?
- In which environment do they live and work and what are their impacts on it?

Subsequently, the aim is to generate data on whether new entrants to mountain farming can mitigate the lack of farm successors and the resulting decline of traditions, management methods and the cultural landscape in Austria. Developing a stable framework was necessary for the entire research process, since agriculture and especially entry into it is a manifold and, therefore, complex topic.

3. Methodology and Approach

This case study is predominantly based on fieldwork in three spatially differentiated regions, conducted between autumn 2020 and spring 2021. As figure 3 shows, two are located in rural mountain areas of the Western Austrian Alps – *Montafon* in Vorarlberg and *East Tyrol* in Tyrol. *Vinschgau*, the third study region, is located in bordering South Tyrol (Italy). None of the areas were chosen arbitrarily: the authors had already met new farmers in the Austrian areas in earlier studies on the topic of amenity migration (Grüner & Konzett 2017); furthermore, informal research prior to the fieldwork revealed that this phenomenon also exists on the South Tyrolean side of the border.

The major advantage of such a multi-regional approach lies, on the one hand, in the possibility of regional comparison, since the agricultural structures in Vinschgau are more similar to Western Austria than to Alpine Italy. This is due to the region's long affiliation with Austria and its autonomous status as granted from the Italian Constitution, the Paris Treaty and the Autonomy Statutes of 1948 and 1972 (Province Bozen/Bolzano 2017). On the other hand, it increased the number of interviewees for the qualitative data analysis, as it was not clear in advance how many new entrants would be found in total.

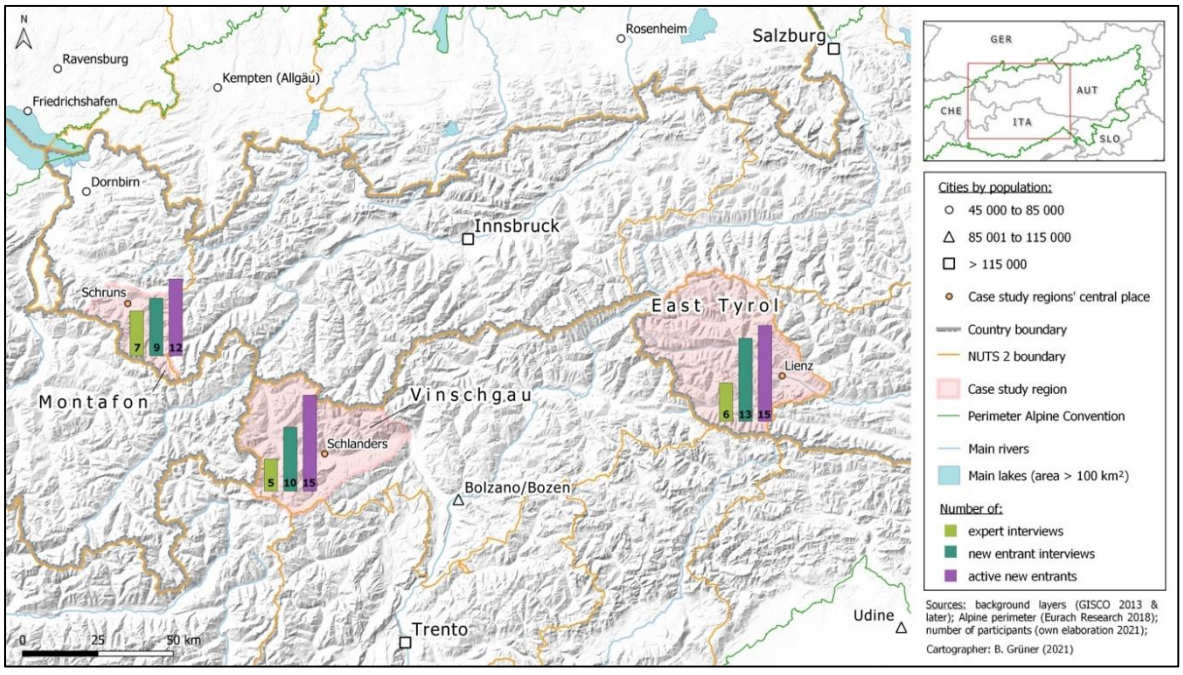


Fig 3. Spatial distribution of interviewees and active new entrants in the case study regions. Source: own elaboration

A purely quantitative methodology is not sufficient to answer the key questions outlined above, as valid investigation can only be realised with the support of qualitative fieldwork. Hence, the authors pursued a mixed-method-approach, consisting of predominantly qualitative data collection triangulated with official agricultural statistics and personal data of the new entrants at appropriate points. Therefore, each of the three case study regions was visited at least once but usually several times for interviews, participatory observations and gathering photographic data.

The research design was developed using *actor-network theory* (ANT) to create a holistic approach that considered the consistent networks between actors and non-human entities. Especially when actors operate within diffuse niches, push forward innovation and, thereby, trigger multiplicative processes, an ANT approach is appropriate, as the resulting data can be better sorted and reassembled (Latour 2005: 12).

Following the human actors first, partly structured interviews with experts were conducted from each case study region to identify new entrants to mountain farming. As figure 3 illustrates, in this data collection stage, a total of 18 experts (5 female, 13 male) were interviewed in the case study regions. This included representatives of local politics, regional planning and the chamber of agriculture[5]. In addition, locals with a distinct connection to agriculture such as family farmers and representatives of Farm Youth and the Union of Young Farmers[6] were also interviewed. Hence, a better perspective on the prevailing agricultural regime was provided. All experts were questioned about the opportunities and challenges of new entrants in relation to structural changes in mountain agriculture. They were also asked to provide contact with other new entrants they knew. The authors defined them preliminary as people without previous agricultural experience.

In using such a loose definition, the research team was able to apply an open-minded approach to the data collected and avoid omitting specific actors. Nevertheless, this broad approach also led to initial complications, as the experts either did not associate new entrants with agriculture, or accepted the definition but did not initially know of any appropriate contacts. Thus, asking about new entrants was often followed by a period of silence, since this niche was not clearly visible within the wider agro-community. In contrast, local and regional online media shed light on newcomers in agriculture much earlier, as they often manage their farm in a very eye-catching way. In the end, the authors found it an easier strategy to identify new entrants by simply researching online rather than relying solely on local experts.

After the first person was found, further contacts were scouted by *snowball sampling*. This strategy is particularly effective when the sample is limited and the group of interest is not clearly visible within the main population (Sadler et al. 2010: 370). Certainly, such a specific approach did not identify all new entrants to mountain farming in Montafon, East Tyrol, and Vinschgau. After all, new entrants often do not know one another, even if they live in the same community. Therefore, it is most likely, that the actual number of new entrants in the case study regions is slightly higher. A complete survey was neither possible nor necessary, as new participants only have to be found until *data saturation* is achieved. This is the case if newly collected data show redundancy to the previous collected data (Saunders et al. 2018: 1896). The households identified were addressed via a partly structured interview in person on-site or via video conference[7]. As a result, 24 new farms were located. Within these agricultural households, a total of 32 people (13 female, 19 male) were interviewed (figure 3). In terms of qualitative research, a clear distinction between the number of households and interviewees was made, as in some households not all active new entrants (i.e., partners or parents) were available at the time of the survey. The topics discussed in each interview included biographic background, route into farming, living and working environments, management techniques, farming methods, collaborations and entry challenges. All interviews were recorded, transcribed and subsequently analysed according to the grounded theory techniques of Corbin & Strauss (2015).

[5] *Landwirtschaftskammern* legally represent farmers' interests and are organized at federal state level.

[6] *Landjugend/Jungbauernschaft* is a regionally organized association for the empowerment of rural youth and young farmers.

[7] This procedure was mainly due to the travel restrictions associated with COVID-19 during the winter season 2020/2021.

Besides this mainly qualitative type of data, questions about hard facts were also asked during the interviews, including information concerning their socio-demographic background, farming start date, agricultural education level, and type of housing and farming. The findings regarding these issues will be explained in more detail in the following chapter.

4. Starting Mountain Farming in the Alps

Agriculture is manifold and, thus, concerns not only human actors but also their social and spatial environment, and the interdependence that arises in between. The following section characterizes new entrants to mountain farming and their routes into it, as well as the opportunities they find to gain a foothold there. Four anchor points for this socio-technical network emerged in the field: *housing*, *thinking*, *farming* and *collaborating*. To sufficiently appreciate their interaction, the actors who have taken a new role in mountain agriculture must first be described.

4.1 Actors and their Fingerprints

Beside new entrants, the authors identified a variety of other mountain farming actors in the interview data (figure 4). They differ in their agricultural mindset (traditional versus innovative6) as well as their socialization. Some were socialized on farms, others predominantly rurally or even in urban environments.

Family farmers are traditional farmers and represent the largest number of agricultural actors in all three case study regions. They have grown up in and with agriculture, have run their farm in the family for generations and typically transfer it to a family member (children or, on occasion, close relatives). Those farmers who were not primarily intended to be successors but who, due to various circumstances (e.g., illness, accident or death of the designated heir), finally came into the picture, are known as *atypical heirs*. They are also socialized in agriculture but do not act traditionally as family farmers, as they mostly engaged in other professions before they started farming and, thus, often bring a broader viewpoint. The authors call farmers who combine tradition and innovation in a novel way *tradinnovative farmers.* This type evolves from either a family farmer or an atypical heir, who already manages parts of the farm in an alternative manner. In contrast to atypical heirs, tradinnovative farmers have been working in agriculture their whole lives and, at some point, came to a juncture in their life. Since then, they have reflected on their previous traditional management techniques and gradually replaced them with innovative approaches. *Relationship farmers* are also innovative. This kind of person – mainly female – married into a family farm or is in a relationship with its inheritor. They either already grew up on a farm or were socialized agriculturally through life's detours (e.g., holidaying on a farm or growing up in the countryside). Thus, they cover a broad socialization spectrum and operate predominantly in innovative-traditional approaches, just as *landscape cultivators* do. Their primary agricultural output is the preservation of the natural and cultural landscape. Most of them combine traditional management methods with novel approaches and use technical achievements that facilitate working in steep terrain. This research has also identified two other types: *seasonal workers* and *real estate speculators*, who have very minimal agricultural backgrounds. Seasonal workers often come from outside and reside temporarily in mountain regions, supporting the local agro-community during holiday or harvest seasons. They either work in alpine husbandry as shepherds or in alpine dairies, for example, or directly on the farm in the course of WWOOFing[8] stays as harvest workers. Real estate speculators, as they are branded by a large number of experts, are mainly those from outside who buy agricultural property (typically farm buildings) as a second home or profitable investment, with no intention of farming. Nevertheless, this group of people often renovate old farm buildings in both innovative and traditional ways.

[8] Worldwide Opportunities on Organic Farms (WWOOF) is a worldwide movement to link travelers (*WWOOFers*) with organic farmers.

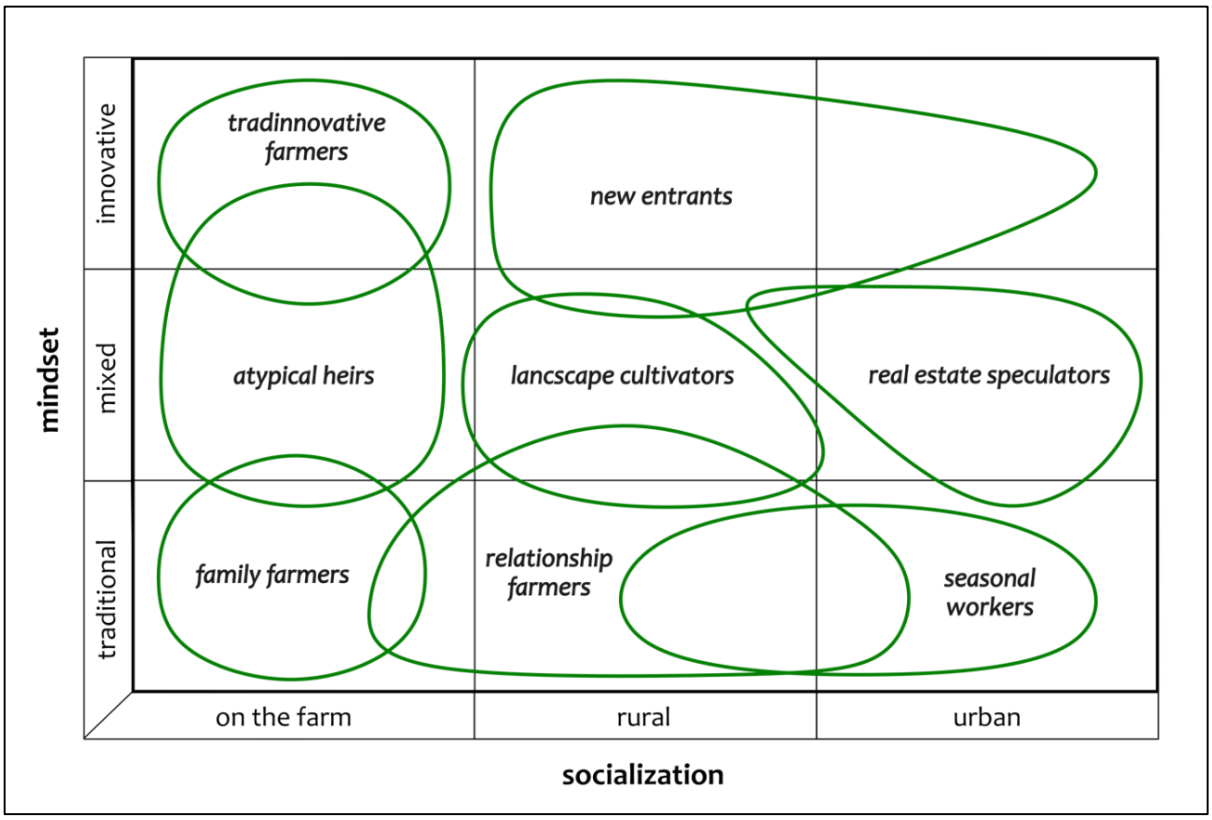


Fig 4. Classification of actors in mountain farming depending on their agricultural socialization and mindset. Source: own elaboration

Despite all these different actors in farming, the group of greatest interest in this case study are *new entrants* into mountain farming. In short, these are newcomers to farming who have been socialized off the farm and can hence give free rein to their creative ideas. As a result, they show the highest innovation potential compared to all the other actors mentioned above. New entrants correspond to the so-called *ex novo* as defined by the Agricultural European Innovation Partnership. It uses this term to describe people with little or no previous agricultural experience (EIP-AGRI 2015: 5), who clearly distinguish themselves from family farmers through their routes into farming, impacts and openness to innovations.

4.2 Characterizing the New Entrants

Socio-demographic characteristics are briefly mentioned here to provide an initial picture of the identified new entrants. Detailed insights are evidenced in the following chapters and in table 1.

Tab 1. Socio-demographic and agricultural characteristics of the 24 households interviewed in the field. Source: own elaboration

pseudonyms	study region	origin	gender	age	family type	socialization	agroexperience	entry year	housing	ownership	operation	prior profession	education	main operation	area in ha
Thomas & Margareta	ET-AT	NC	m/f	early 30's	family	U	?	2020	farm	rent	full	industries	3	mixed agriculture	10.0
Engelbert	ET-AT	NC	m	early 50's	single household	U	CH	1997	farm	purchase	part	services	3	livestock	9.0
Dorian & Rosa	ET-AT	NC	m/f	early 40's	family	U	CH, ENV	2010	farm	purchase	part	services	6	mixed agriculture	5.0
Manfred	ET-AT	RM	m	mid 30's	family	U/R	CH, ENV	2020	farm	purchase	part	industries	3	mixed agriculture	5.7
Manuela	ET-AT	ATH	f	early 50's	family	U	CH, ENV	2014	farm	purchase	part	services	3	mixed agriculture	2.0
Christoph	ET-AT	NC	m	mid 50's	family	U	EDU, CH, ENV	2021	farm	purchase	part	agriculture	6	mixed agriculture	7.0
Hannelore & Mathias	ET-AT	ATH /NC	f/m	early 50's	family	R/U	CH, INT, EDU	1991	farm	inheritance	full	services	3	mixed agriculture	9.3
Walter	ET-AT	NC	m	mid 50's	family	U	CH, ENV	1991	farm	inheritance	part	industries	6	forestry	3.0
Manuel & Leonie	ET-AT	RM/NC	m/f	early 30's	family	U/R	CH, NH	2019	farm	purchase	part	industries	6	horticulture	1.0
Hannes	MF-AT	RM/NC	m	mid 50's	family	R/R	CH, ENV	2015	farm	purchase	full	industries	2	livestock	25
Maria	MF-AT	NC	f	mid 40's	family	U	INT	2017	farm	built	part	services	2	livestock	4.0
Josefine	MF-AT	ATH	f	mid 20's	extended family	R	CH, ENV	2018	other	built	part	services	2	livestock	43.0
Martin	MF-AT	ATH	m	early 30's	single household	R	CH, ENV	2016	apartment	rent	full	agriculture	6	arable farming	0.3
Hermine & Jonas	MF-AT	RM/NC	f/m	early 40's	family	R	INT, ENV	2014	farm	purchase	part	services	3	livestock	16.0
Manfred & Mattea	MF-AT	ATH	m/f	mid 40's	extended family	R	CH, INT	2016	farm	built	part	industries	2	mixed agriculture	9.0
Paul	MF-AT	NC	m	mid 50's	family	U	INT	2011	farm	purchase	?	services	6	forestry	4.0
Adam	VG-IT	ATH	m	early 30's	family	R	CH, ENV	2012	apartment	leasing	?	industries	2	viticulture	0.1
Wilhelm	VG-IT	ATH	m	mid 40's	single household	R	CH, ENV	2011	farm	purchase	part	industries	2	mixed agriculture	5.4
Kilian	VG-IT	ATH	m	late 60's	relationship	R	CH	2011	other	leasing	part	services	2	arable farming	30.0
Ursula & Valentin	VG-IT	ATH/RM	f/m	mid 40's	family	R/U	ENV	2002	house	inheritance	part	services	6	livestock	1.0
Niels	VG-IT	ATH	m	mid 40's	family	R	?	2014	farm	purchase	part	services	2	arable farming	3.0
Antonia	VG-IT	RM	f	early 30's	extended family	R/U	CH, ENV, EDU	2014	farm	inheritance	full	agriculture	6	mixed agriculture	4.5
Alban & Petra	VG-IT	ATH	m/f	mid 40's	family	R	?	2015	farm	built	full	industries	2	mixed agriculture	3.0
Hannah	VG-IT	NC	f	mid 40's	extended family	U	CH, VAC	2012	farm	purchase	full	services	6	viticulture	3.0

COLUMN DESCRIPTIONS: ? = not considerable; **study region:** ET = East Tyrol (Austria), MF = Montafon (Austria), VG = Vinschgau (Italy); **origin:** NC = newcomer, RM = remigrant, ATH = autochthonous; **socialization:** U = urban, R = rural; **agro-experience:** CH = childhood, ENV = acquaintances & relatives, EDU = higher education, INT = basic interests, VAC = vacation; **education:** ISCED-2011 levels by the UNESCO (2012)

Besides the 32 new entrants interviewed, a total of 43 (21 female, 22 male) active new entrants to farming were located in the three study regions Vinschgau, Montafon and East Tyrol (figure 3). This number includes parents and partners working and helping on site who were not interviewed but excludes children, as they do not as yet play a major role in farming on site. Regarding cohabitation, it can be shown that most new entrants live with their family (i.e., partner and children) on the farm. Only two of them, both male, live in a single household, all others are in a hetero partnership. Almost every second household contains children who live permanently or temporarily on the farm, depending on their age. It ranges from infancy (1 year) to young adulthood (34 years). Among these households are those that also share the building as an extended family, either with their own parents or, very occasionally, with the farm's transferors. Living together with parents mostly happens with autochthons, as newcomers typically migrate to mountain regions without family.

In summary, the new entrants tend to be of working age, as demonstrated by an average age of 43. Most were previously employed in industry or the service sector before they entered mountain farming, or still are if operating the farm part-time. The latter is practised by the overwhelming majority, as they have another main occupation and do not depend on their farming outputs. A few studied Agriculture at

university out of self-interest and, thus, were already active in the primary sector before but without operating a farm.

4.3 Routes into Farming

Prior to the field trips, the authors assumed that there is just one path for newcomers to farming: namely that new entrants exclusively in-migrate from (urban) areas outside the Alps to high mountains to decelerate their lives through agriculture. Nevertheless, the research shows that this is only one side of the coin, because half of the interviewed new entrants are *autochthons*: they grew up directly in the respective case study region or in its immediate vicinity. Similarly, there are also a few people who re-migrated to their place of origin after some time of staying away. Alongside them, there also exist *newcomers*: those completely new in the community on the one hand and new to mountain farming on the other. While autochthons grew up in the countryside and had latent experience of farm life, newcomers, who migrate mainly from urban areas, are socialized much less intensively in agriculture. Although the intensity of previous agricultural experience for new entrants differs, their socialization often takes place at around the same time. For most of them, their route into farming was already paved in their childhood or youth, by living near the farm of distant acquaintances or relatives and visiting them during the holidays. Nevertheless, the majority did not start farming before 2010. Unfavourable circumstances often provide the decisive stimulus for new entrants to question their part in the cycle of life. On the one hand, this can be associated with an individual crisis such as illness or accident and, particularly in case of atypical heirs, the previous owner's sudden death. On the other hand, systemic crises, leading to self-reflection, can also result in someone starting mountain farming. This is what happened to Ursula & Valentin (mid-40s, Vinschgau):

> *[...] it came about because of [male name]. [Community name] does not have a regulated irrigation system. A few years ago, [...] a train derailed at the bottom of the valley because of a mudslide. [...] there were quite a few deaths. Apparently, it happened because a pipe [from the irrigation system] was leaking. [...] And, from then on, [male name] no longer dared to let the water run unattended at night. That was actually one of the reasons why he said we had to work on the irrigation system. And since the [community name] did little or nothing in this case [...] he got together with [...] five farmers. But not real farmers either, they were all hobby farmers or passionate farmers. They all have a passion for the soil and now everything is settled up there.*[9]

This collective of five newcomers to farming now provides a focal point for many other new entrants to the region. Once the individual's decision to start farming has been made, it is important to find suitable conditions. First and foremost, the question of where and how to live and work must be decided.

4.4 Housing

In contrast to family farmers, both autochthons and newcomers can only gain a foothold in agriculture if they have specific qualifications. A strict federal law on land transactions in Vorarlberg and Tyrol regulates who is allowed to acquire agricultural real estate. According to this legislation, only three groups of actors have access to agricultural real estate in Montafon and East Tyrol: family farmers, people with an agricultural education or people with other previous experience in the field. On the other side, any person can take over or acquire a farm in South Tyrol and thus in Vinschgau, even without agricultural training or professional experience.

In addition, one fact seems to be carved in stone: farmers cannot farm without land. An agricultural area is the new entrants' livelihood. Whereas in a regular real estate market the location decides the purchase (Schmied 2007: 14), in the agricultural sector it is the other way around. New entrants generally settle where available property exists according to the slogan 'take what you can get!'; farmholders (i.e., transferors without descendants or uninterested atypical heirs), especially in Austria (Quendler et al. 2016: 60), very rarely convey their agricultural real estate to non-family members. Therefore, new

[9] All direct quotes from the interviewees are translated from German into English mutatis mutandis.

entrants are forced to accept substandard location parameters like unfavourable agricultural land and farming conditions on the one hand, and to tolerate associated financial losses on the other.

Most new entrants have purchased their farm and are still happy about it: to *"simply have your own space where you can develop it yourself"* is how Hannelore and Mathias (early 50s, East Tyrol) sum up the time-consuming process of real estate acquisition. Especially those with children, like Alban and Petra (mid-40s, Vinschgau) have found a safe and healthy place in nature to realize something like green parenting: *"first and foremost, we certainly do it for the family. For the children. We all live here (…) that is the most beautiful thing, when you can simply live together here in nature"*. Owning one's own home is also seen as a secure future investment, as land tends to rise in value. At this point, one might think that something valuable is being created for the next generations, which the children and grandchildren should continue to manage. But the reality is quite the opposite: most of the new entrants say that their children are free to decide whether or not they want to continue farming. In this respect, they differ significantly from family farmers who want their farms to be left in 'good' hands.

Real estate speculators mainly purchase farm buildings as general long-term investments or for specific tourism purposes. In contrast, new entrants need them for housing and, thus, in most cases, treat old buildings very sensitively to preserve 'traditions'. Consequently, newcomers gather detailed information about construction techniques and styles which are regionally typical. New entrants can only afford these renovations, which are often expensive, because of their equity and well-paid occupations outside agriculture.

4.5 Thinking

Many autochthons have – at least for a certain period of time – left their rural roots and migrated to urban areas. Almost all newcomers meanwhile migrate in the opposite direction. New entrants have thus already seen different parts of the world, which helps in taking on a different vantage point than conventional farmers pretend. However, their alternative ways of thinking significantly include reflecting the agro-regime in many ways. This is undoubtedly made easier by their financial independence.

Although these new farmers may have different socio-demographic backgrounds, they share the same idealism and passion. There is no other way to explain why they voluntarily arrive and stay in such a low-wage sector. The implementation of a sustainable mindset in everyday life and work, as well as the immediate realization of their own ideas – following the DIY-principle – are just some of the outcomes driven by their idealism. For example, Manuel & Leonie (early 30s, East Tyrol), who previously lived in a city, appreciate:

> *[…] being hands-on and not just philosophizing while drinking coffee or beer in the evening in the city. It is a wonderful life [in the city], but in my opinion it is not sustainable, because people only talk theoretically. You have to try to put it into practice – everything beautiful that you have in your head.*

Besides, new entrants have a clear idea of their working environment and prefer 'being their own boss'. Independence opens a high degree of freedom, especially in relation to food. Self-sufficiency and the associated regaining of control over the origin and quality of food plays a key role here. In addition, livestock farmers are highly concerned with the rearing and processing of their animals, with constant attention to their quality of life and welfare. Regardless of which agricultural sector they work in, many new entrants do not identify themselves by the title 'farmer'. Rather, their work on the farm and the opportunity to take a step 'back to their roots' shape their identity. Manfred (mid-30s, East Tyrol) made this clear during his interview:

> *I am not a farmer either. I am a peasant. Anybody can be a farmer. It is simply a matter of understanding your soil. You simply have to have a feeling for plants and everything. And I think it is written in the old books. People simply had more time in the past. If it did not grow, then they had nothing to eat, then they were dead, (…) they just had time to look at it and deal with it. And today, the way of agriculture is different. Today, it is mega-mechanization. Who still farms with a horse today? No one anymore. Today, there is mega-mechanization: with drones, with apps, with Microsoft and all*

that bullshit. So that the world's population can be fed. And these kinds of farms do not fit in anymore. And we said, no, we like the small-scale structure. We also do permaculture.

Studying the attitudes of new entrants, it is obvious that they share a progressive mindset that certainly offers multiple opportunities for innovations on and off the farm. Beside these facts, new entrants are also well educated (A-level or higher) and predominantly worked or are still employed in higher-skilled professions. Hence, they implement a lot of valuable experience on the farm.

4.6 Farming

When comparing the average amount of cultivated land per farm in the case study regions' federal state with that of new entrants, the latter group performs worse (table 2). New entrants manage relatively small amounts of cultivated land, but considering their barriers of entry, the size of the cultivated area per farm is quite astonishing.

Tab 2. Agricultural area of mountain farms (excluding forest and alpine pastures) in the study areas. Source: own elaboration

federal state	number of farms[10]	agricultural area (ha)[9]	agricultural area per farm (ha)	median area farmed by new entrants (ha)
Vorarlberg	2,280	27,606	12.1	9.0
Tyrol	9,569	81,554	8.5	5.7
South Tyrol	20,482	96,510	4.7	3.0

In contrast to family farmers, new entrants are free of two significant burdens. Firstly, they are mainly economically independent. No matter what economic sector they worked in before, most of them either have sufficient equity or a well-paid main occupation (e.g., doctor, engineer, lawyer, CEO, etc.) that allow them the freedom to reside, work and live according to their personal lifestyle choices. Therefore, they are less subjected to the agro-regime and its subsidies and requirements. Secondly, the new entrants have usually taken over vacant farms and a major generational responsibility automatically disappears. They have not experienced the techniques and mindset of the previous owners, and, contrary to Korzenszky (2018: 6f), there is no transferor left on the farm to whom they need to prove themselves. This also excludes the necessity to take care of the older generation. What at first glance seems like a notable benefit for their businesses also has its downsides, because generational norms not only constrain individuals but also support them in the way they act (Downey et al. 2016: 58f).

Based on their experiences outside the primary sector, new entrants are familiar with diversified business operations and often use various marketing strategies to distribute their products. A central focus is selling products directly to the customer without detours, such as distribution via social media, regional food cooperatives and marketing associations. Barter trade is also becoming a popular distribution channel again. The implementation of farm-gate sales at least brings customers and production site even closer together and create strong customer loyalty, as Hannes (early 50s, Montafon) proudly mentioned:

Part of a farm is marketing – the farmer sells his own products […]. This is important for us to tie customers to the farm and the way it is kept – to give them an insight into how the animals live and are also slaughtered and processed. Where do the animals live, etc. This will become important to some customers.

Not only direct marketing but also the quality of their products plays a major role in sustainable agriculture – one of the main motivations for entering the mountain farming sector. Especially livestock farmers have made animal welfare a priority, which even starts with the selection of the animal breed. Here, the focus

[10] Number of farms and amount of agricultural area in Vorarlberg and Tyrol according to the Federal Institute of Agricultural Economics, Rural and Mountain Research (BAB 2021); in South Tyrol according to the Office for Agricultural Information Systems (LAFIS 2021).

lies on robust species that used to be typical in the region but have now disappeared due to mass production. Hannes has occupied a niche in the agro-regime by introducing an almost forgotten breed:

> *This is a rare breed of animal that comes from the Montafon. The breed sounded interesting to us and when we looked at it more closely, we actually concluded that they are ideal for the conditions. They are good feed converters, do not need much energy, are ideal in steep terrain, are ideal in [giving birth], they are interesting for clearing bushes, keeping open areas free.*

In crop production, robust plant species are being reintroduced, which lead to a reduction in pesticide treatments, for example. Both independence from finances and the agro-regime inspire an ease in operations, even if this sometimes means entering a grey area. This includes, for example, selling processed meat to friends and acquaintances, even though the farmers lack the appropriate authorization.

The findings so far make it seem as if mountain farming is a breeze for new entrants, but this is not the case, especially when they enter agriculture, they lack basic knowledge. Farm management requires all-encompassing knowledge of cultivation techniques, livestock breeding, fertilization, machinery use and repair, etc. Working in mountain regions is additionally accompanied by several impediments such as dealing with difficult terrain, seasonal weather conditions, soil quality, natural hazards, to name but a few issues. On particularly steep slopes, the work can only be managed by hand, which is very labour-intensive and physically challenging. The number of new entrants who have acquired comprehensive agricultural know-how is not to be underestimated, precisely because they had to undergo agricultural training to acquire real estate, as previously mentioned. Some of them have a university degree in agriculture. Others have gained necessary knowledge from exchange with family farmers and experts or professional literature. Some follow the principle of 'learning by doing' but, especially when breeding livestock, need to access professional support. In urgent cases, a web tutorial can also solve problems, as Josefine (mid-20s, Montafon) emphasises:

> *For example, I was often there when cows calved, but you approach things very differently once you are in charge yourself. And the first time seemed like ages to me, where I was already hoping that I was not doing anything wrong here. I once watched a YouTube video on the side, with the different phases [of birth]. So, I knew which phase we were in. Thank God! Yes, and that is how you learn it.*

The Internet and social media are also profound sources of knowledge and support networking. The latter is particularly important in the first stage of entry in order to gain a stable foothold.

4.7 Collaborating

Although many new entrants have been active for several years, they still do not have a sales market or enough production volume to sell widely. This prevents them from being able to make a living from agriculture, even if this is one of their main business objectives. Especially those freshly arrived usually lack sufficient networks for advertising, distribution, transport or regular customers. Occasionally, however, new entrants to farming have already developed a broad network with the food industry, agricultural institutions, food cooperatives and associations, scientific cooperation and projects. Kilian (late 60s, Vinschgau) is an illustrative example in this context:

> *There is this group of scientists, the professors for sustainability. I am sure some interesting things will come out of that. I also believe that we will be able to increase the number of fields and cultivate even more [plant species] in Vinschgau. Here, new entries may even be a cornerstone. As I said, there are already a lot of people.*

It turns out that diverse networks are absolutely necessary to gain a foothold in this field. But it is not only the new entrants who benefit from these various networks but also local farmers, institutions and associations, as knowledge exchange occurs through their interaction. In summary, new entrants gain conventional wisdom about traditional farming methods, herbology, livestock breeding, etc. from local farmers, while in return they introduce new marketing channels and show alternative cooperation possibilities (e.g., joint marketing and sales platforms). Equally important to mention is the mutual

assistance, which includes help from family and neighbours. Most autochthon new entrants can rely on the strong support of family and friends, their neighbours and volunteers like WWOOFers, which makes farming much easier for them. As shown by the following statement from Christoph (mid-50s, East Tyrol), one part of an autochthonous couple who recently purchased a farm and are now gradually moving to the high mountains:

> *We are already happy or have had so many positive experiences under the heading of neighbourly help and are already trying to help others […]. And let us say the 10 people we already know relatively well, I think we can call them at any time and they will help us. Whether it is replacing shingles [on our roof] or if it is about farming or something.*

This additional help from the neighbours is indispensable, especially due to the working conditions in mountain regions. In contrast to family farmers and autochthonous entrants, newcomers who migrated from outside cannot typically rely on the help of family members, as they are not permanently on site. Therefore, a close collaboration with the local agro-community and neighbours is all the more important for newcomers.

5. Discussing the Role of New Entrants to Alpine Farming

Following the actors and their networks during this multi-regional case study, the authors identified a special type in mountain agriculture with new entrants. It is evident that the observed participants interact with their social, technical and spatial environment. Given this interplay, agricultural individuals are characterised by *socio-technical networks*, as Ploeg (2003: 101) states. Newcomers to mountain farming create a special socio-technical network that differs from conventional farming in two ways. On the one hand, due to their off-farm socialisation compared to family farms and, on the other hand, due to the farming difficulties on the steep mountain slope in contrast to farmers in the lowlands.

Figure 5 illustrates this socio-technical network of new entrants to mountain farming, which emerged from the gathered quantitative and qualitative data covering the spheres of *housing*, *farming*, *thinking*, *collaborating* and *socialization.*

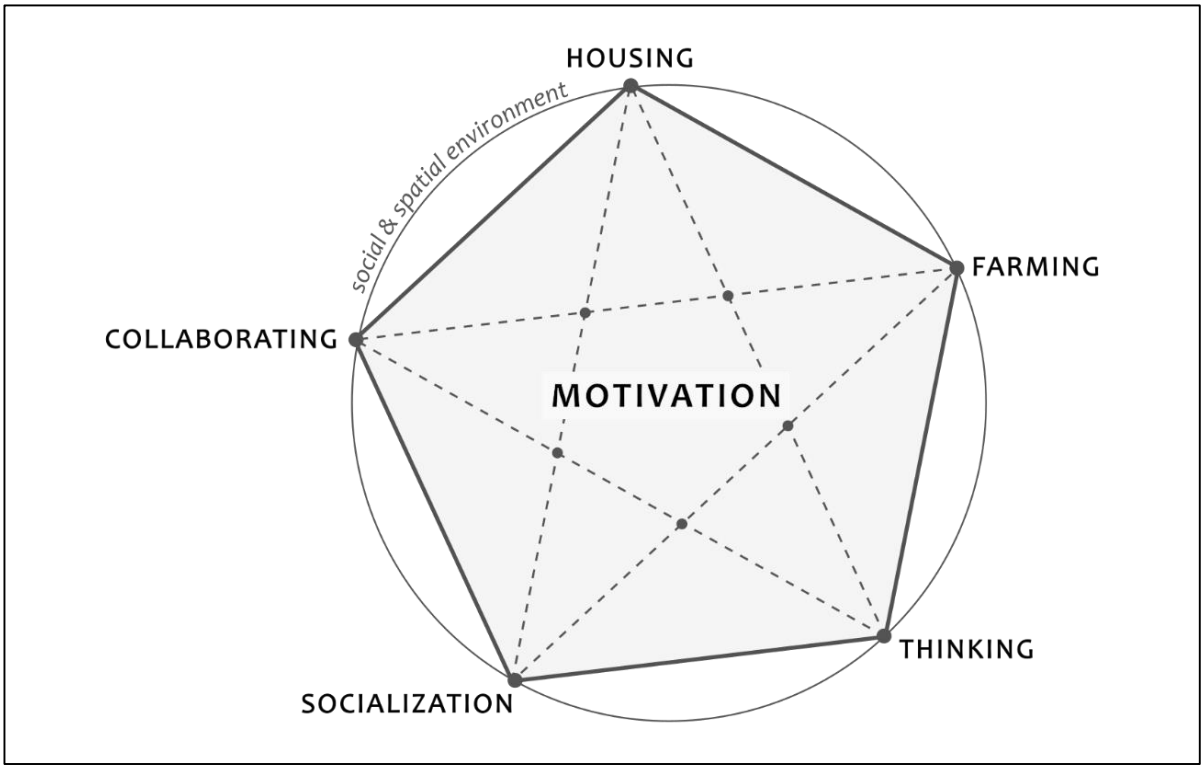


Fig 5. The socio-technical network that guides new entrants through their mountain farming. Source: own elaboration

The major impact on these five anchors is where new entrants originally come from. Newcomers, who in-migrated from and were mainly socialized in urban areas, are confronted with a variety of start-up disadvantages within their socio-technical network.

This begins with the acquisition of agricultural real estate for making a living. While autochthones are more likely to inherit a farm, even though they can afford it, newcomers have difficulties acquiring an appropriate place to live due to the conservative mindset within their social environment: either they have no inside information about available farms on the real estate market or are generally denied access. The latter is linked to a latent fear of both the agro-regime and family farmers opening the door and transfer agricultural land to non-family members. Poli (2013: 22) points this out in relation to agricultural real estate investments used for tourism. For new entrants, insufficient access to land and markets severely limits their choice of places to live and work, as the EIP-AGRI (2015: 10f) argues. In all three case study areas, this predicament is not predominantly related to finances. Even if the necessary legal requirements are achieved, only unfavourable locations are available, which conventional farmers either do not value highly (old buildings, unfavourable farming conditions, etc.) or simply cannot afford. Leasing would be the easiest way to acquire agricultural real estate, as, unlike with purchasing, new entrants do not have to prove their agricultural education or experience. But owning their own property is worth so much that new entrants are willing to accept real estate market discriminations. They are finally able to fulfil their desire to act independently and self-regulated in a large playing field, where their control over the supply and quality of food is assured.

This pre-selection of agricultural real estate also determines the farming opportunities of new entrants. However, in the authors' point of view, these restrictions strengthen rather than weaken both newcomers and autochthons in how they implement creative agricultural ideas. Thanks to their prior experience outside agriculture, the new farmers can implement a variety of ideas that are not accessible to family farmers due to generational restrictions. Precisely because new entrants enter the primary sector more by vocation and less because of family burdens, they are predestined to change agriculture towards more equitable, sustainable solidarity-based practices, as Monllor (2013: 34) also notes. Although new entrants and family farmers think about and manage their farms differently, both parties show the same idealism and passion for agriculture. In addition, they were socialized at different distances from the farm. For new entrants, their first contact with agriculture, and therefore the starting point of their rural socialization, was in childhood or youth on more of a latent and ludic level rather than through direct economic dependence. According to Dolci et al. (2019) and Dolci & Perin (2017), crises are key triggers for entering agriculture. In all three case study regions, the overwhelming majority joined after 2010. The extent to which the global economic crisis of 2008 is responsible, therefore, is not yet clear, but, in the authors' opinion, the connection is evident. In addition to this obvious systemic crisis, individual crises motivated the new entrants to step in.

Especially when entering Alpine terrain, close collaborations with the family and institutional cooperation as well as basic agricultural knowledge is required, which typically newcomers among new entrants lack. Fortunately, knowledge deficits are rapidly compensated for with the help of locals and experience-based learning and collaborating, which lay another foundation stone that bypasses agro-regime perceptions. Additionally, farming under unfavourable income and management conditions requires creative ideas and alternative management concepts, which are supported by the different vantage points of new entrants. Newcomers in the field also start agriculture with a high-level of education and bring a progressive mindset along that also rubs off on family farmers – often quite inconspicuously. In return, new entrants rely on the profound knowledge of the local agro-community.

Despite all the tensions that arise mainly due to the prevailing agro-regime that the new entrants have to deal with, it is ultimately their motivation that prevents this socio-technical network from collapsing and offers the driving force to sow further seeds within this niche.

5.1 Environmental Impacts

New entrants have initiated a wide range of social and spatial impacts on the environment of the case study regions, as illustrated in figure 6. In demonstrating novel forms of farming through their role model function, they increase interest in alternative management techniques for other agricultural actors in the field. For this reason, they may well be described as pioneers who exert an unconscious or conscious influence on the socio-cultural landscape.

Unconventional forms of new entrant farming cause spatial effects that contribute to landscape diversification (figure 7). This is mainly due to uncommon cultivation techniques (e.g., viticulture, arable farming, vegetable growing) within the prevailing agro-regime, which is dominated by livestock and dairy farming in Montafon and East Tyrol, and by orchards in Vinschgau. New entrants also prefer traditional farming methods, plant species and animal breeds, whose preservation and continuation leads to the regional cultural landscape's maintenance. Although they cultivate less land compared to traditional farmers, their contribution to land management should not be disregarded, as they operate their land extensively. They also cultivate unfavourable mountain areas that are being less managed due to agricultural structural change. In keeping these areas open, new farmers contribute to preventing natural hazards such as avalanches and mudslides (Tasser et al. 2005: 416).

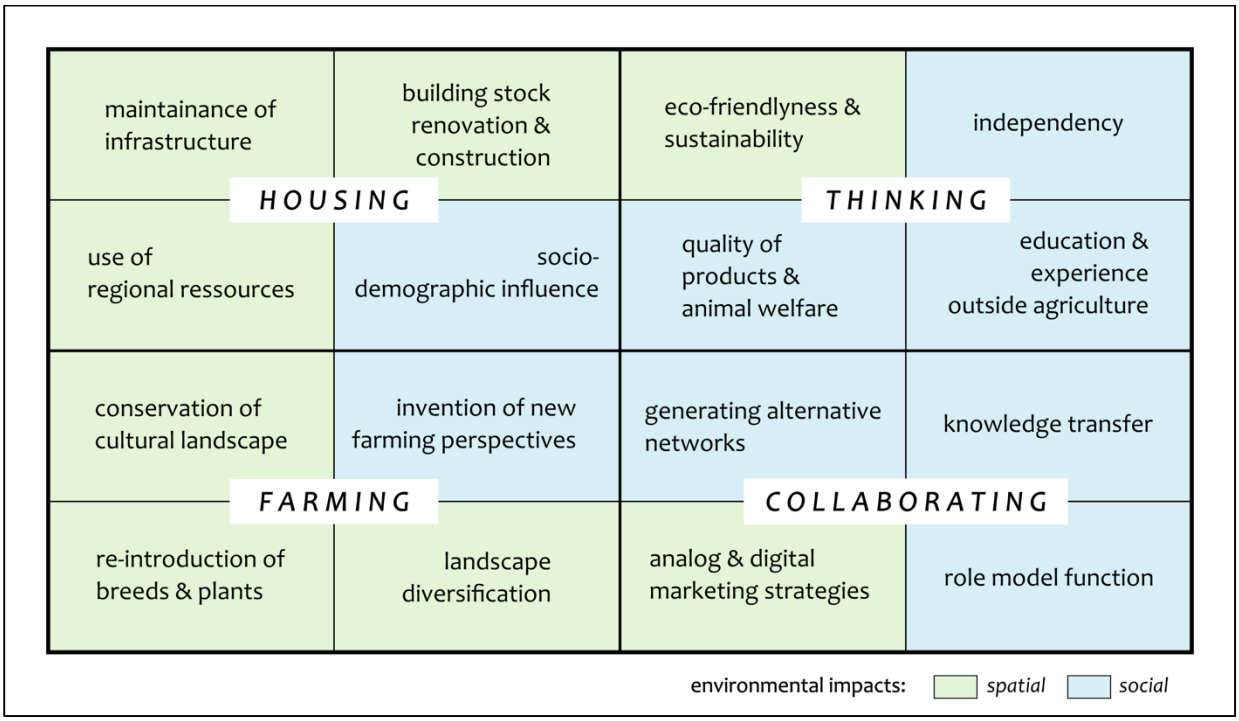


Fig 6. Spatial and social impacts of new entrants to mountain farming. Source: own elaboration

The way new entrants act to housing and collaborating, and how they think, also lead to multiple influences. Diverse social impacts stand out and are significantly important for the preservation and further development of villages, mountain farming communities and its agriculture.

Besides socio-demographic influences (e.g., more children and the associated positive effects on local schools and clubs), the identification of new ways of networking and marketing, and the mutual transfer of knowledge, could all be named as essential factors that sow fertile seeds in society.

Meanwhile, spatial impacts are no less important, as new entrants use regional resources, maintain and expand analogue and digital infrastructures (e.g., cooperative farm shops, workshops, online marketing), and contribute to the preservation of traditional cultural assets through their renovation and conversation efforts. Their diverse activities in the social and spatial sphere create synergy effects, which can lead not only to increased regional value creation but also to the preservation of mountain farming and its

traditions, even if in the case study regions, it is often not recognized or appreciated by the agro-regime. The interviewed experts know that a breath of fresh air is important for the existing regional agro-regime in terms of agricultural structural changes and, thus, for the preservation of agriculture in mountain regions. But most are sceptical that a few new entrants can make a big difference. The presented research shows a different picture: in all three case study regions, new entrants exert a variety of impacts on the cultural landscape which primarily are the implementation of landscape cultivation or the introduction of ecological and economical diversity. And this is only the beginning, because these new actors are already part of a larger picture that reflect positive perspectives on the future of rural areas. What remains to be clarified at this point is the determination of the underlying structure of this phenomenon and its actors. Therefore, a definition is needed.



Fig 7. New entrants cultivated a formerly abandoned hillside. Source: Hannah's archive, 2013

5.2 Definition Approach

Monllor i Rico & Fuller (2016: 534) distinguish between family farmers and new entrants but only consider new entrants to be those who have had no previous agricultural connection (i.e., have not grown up on a farm). However, this definition seems too narrow as the presented results in this study illustrate.

Not only newcomers but also autochthons with existing agricultural connections can start from scratch and contribute to agriculture. Among them are locals who did not grow up on a farm but lived in an immediate rural vicinity, or with a clearer link to a family farm, as the example of atypical heirs in this research demonstrates. For both types, farming in mountain regions is challenging, low-paid and happens in unfavourable terrain. New entrants need financial independence (a side job or high equity) on the one hand, and a high degree of idealism and passion on the other, to gain a long-term foothold under these conditions. Therefore, all those who overcome arrival hurdles should be considered as a *new entrant*. This term is preferred by the authors because, unlike *new farmer* or *new peasant*, it is far less entangled with identity. What role identity plays within the new entrants' socio-technical networks has not yet been considered by the authors. After this comprehensive examination of the definitional question of new entrants to mountain farming, the authors venture a definition:

> *New entrants to mountain farming in the Alps are people of any age and any gender who have a semi-agricultural or non-agricultural background and consciously decide to work in mountain agriculture –*

whether for profit or not. This includes autochthonous atypical heirs, who start from scratch, and complete newcomers with foreign or native backgrounds. Family farmers, on the other hand, are not included.

Two additional actors were identified in the field of mountain agriculture: relationship farmers and seasonal farmers. Although they do not typically take over an entire farm, they also make an important contribution to the continuity of mountain farming, as with new entrants. This statement needs to be substantiated by future research.

6. Conclusion

Farming in mountain regions is generally only possible by adapting to unfavourable site conditions. Therefore, it is surprising that new entrants can be identified in this field. The presented multi-regional study clearly shows that new engagement with Alpine farming in the Austrian regions of Montafon and East Tyrol, and Italian Vinschgau (South Tyrol), takes place as an interaction of social, technical and spatial elements.

Although the routes of 32 interviewed new entrants are very different, they all first experienced the countryside and especially farming in their childhood or youth. Autochthonous new entrants have often come into closer contact with agriculture than in-migrated newcomers. Thus, the latter usually encounter more start-up difficulties on and off the farm. Despite considerable problems inheriting agricultural land, both subtypes finally succeed in entering mountain farming with the necessary idealism. As a result, they fulfil their desire to act in and with nature in a self-determined way within the spheres of housing, farming, thinking and collaborating, by strongly questioning the agricultural industry. In doing so, these new farmers plant major social and spatial seeds in their environment. Their 'back to their roots' attitude demonstrates opportunities for sustainable, extensive forms of agriculture far beyond the prevailing management methods used within the case study regions. Therefore, they often act as role models within the local agro-community, even if they are often not perceived as such.

According to these findings, the interaction between the niche of new entrants and different levels of the agro-regime remains open. The innovation potential of new entrants in social, technical, organizational and ecological terms also forms a research gap especially in the field of mountain agriculture that needs to be closed. Furthermore, future research must focus on the economic, environmental and social consequences of new entrants' farming in order to better understand their impact on peripheral mountain regions. For this purpose, a wide range of data is needed; not only to gain qualitative insights, such as the authors illustrated here, but also to enable quantitative impact monitoring of this movement. However, the collection and publication of such in-depth data should not solely be carried out by research projects but also by statistical offices of the Alpine states.

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